REMARKS

At the outset, applicants would like to thank Examiner Rao for his time and consideration of the present application at the interview of October 7, 2003. At the interview, the contentions of the outstanding Official Action were discussed.

In the outstanding Official Action, claims 1, 3 and 6-13 were rejected under 35 USC 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention. Applicants believe that the present amendment obviates this rejection.

The Official Action rejected claims 1, 3 and 6-13 for reciting the phrase "amino acid activity". However, the claims have been amended to recite the phrase "amino acid identity". Applicants appreciate the suggestion from the Examine as how to overcome this rejection and believe that the claims are definite to one of ordinary skill in the art.

Claims 1, 3, 6-13, 24 and 25 were rejected under 35 USC 112, first paragraph, as allegedly being based on a non-enabling disclosure. Applicants believe that the present amendment obviates this rejection.

In imposing the rejection, the Official Action acknowledges that the specification is enabling for glucosyltransferases with SEQ ID NO:2. However, the Official

Action contends that the specification is not enabling for glucosyltransferases comprising fragments of SEQ ID NO:2 that are 50%, 55%, 60%, 65%, or 70% identical to the fragments of SEQ ID NO:2.

As discussed at the interview, applicants believe that the present amendment obviates this rejection. The Examiner's attention is respectfully directed to amendment claims 1, 6, 7, 9 and 11-12, wherein the claims recite a 90% amino acid identity with corresponding sequences of SEQ ID NO:2.

Support for this recitation may be found in the present specification at page 3, lines 25-30. Moreover, the Examiner's attention is directed to new claims 26-28 which are directed to SEQ ID NO:2 itself.

Thus, as a result, it is believed that claims 1, 6, 7, 9, 11, 12, and 24-28 are supported by the present disclosure.

In the outstanding Official Action, claims 1, 3, 6-12, 24 and 25 were rejected under 35 USC 102(b) as allegedly being anticipated by VAN GEEL-SCHUTTEN et al. (1998). This rejection is respectfully traversed.

Applicants believe that the VAN GEEL-SCHUTTEN et al. publication fails to disclose or suggest the claimed invention.

The publication fails to teach any specific enzymes. While the publication vaguely refers to the role of biosynthetic enzymes on page 701, the publication does not teach or even

suggest that a protein was isolated or characterized. As to the "enzyme localization studies" found on page 698, applicants note that this was for the overall EPS of biosynthetic enzyme activity. The overall EPS of biosynthetic enzyme activity was assayed by incubating wash cell suspensions in dialyzed supernatants with sucrose. EPS production was measured as the total carbohydrate content of ethanol-precipitateable material.

Thus, applicants believe that VAN GEEL-SCHUTTEN et al. does not disclose or suggest the claimed isolated protein. Applicants believe that the cited publication fails to anticipate or render obvious the claimed invention.

Claim 13 was rejected under 35 USC 103(a) as allegedly being unpatentable over VAN GEEL-SCHUTTEN et al. in view of AUSUBEL et al. This rejection is respectfully traversed.

In an effort to remedy the deficiencies of the VAN GEEL-SCHUTTEN et al. publication, the outstanding Official Action cites to AUSUBEL et al. The Official Action contends that it would have been obvious to one of ordinary skill in the art to make a recombinant enzyme of the claimed invention by further purifying the enzyme, microsequencing the purified protein, designing a probe based on the microsequencing data and analyzing a cDNA library of the lactic acid bacteria leading to the isolation of a cDNA clone and expressing such a clone to obtain a recombinant protein using the methods taught by AUSUBEL et al.

However, as noted above, VAN GEEL-SCHUTTEN et al. fail to teach the claimed enzyme. While the AUSUBEL et al. reference may disclose general techniques that one of ordinary skill in the art may use, the article does teach the claimed isolated protein. Moreover, there is no suggestion to use the disclosed techniques to obtain the claimed invention.

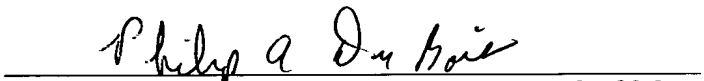
Thus, applicants believe that the proposed combination of VAN GEEL-SCHUTTEN et al. in view of AUSUBEL et al. fails to disclose or suggest the claimed invention.

In view of the present amendment and the foregoing remarks, therefore, it is believed that this application is now in condition for allowance, with claims 1, 6, 7, 9, 11, 12, and 24-28, as presented. Allowance and passage to issue on that basis are according respectfully requested.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

YOUNG & THOMPSON



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